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DICTIONARY FILE UPDATES: 21 NOV 2005 HIGHEST RN 868586-21-4

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

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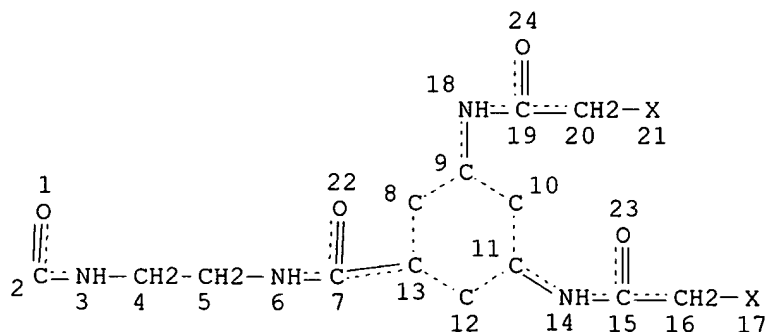
*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

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L4 STR



*File file search run on
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE

=> file caplus; d que nos 17

FILE 'CAPLUS' ENTERED AT 15:00:43 ON 22 NOV 2005

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FILE COVERS 1907 - 22 Nov 2005 VOL 143 ISS 22

FILE LAST UPDATED: 21 Nov 2005 (20051121/ED)

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L4 STR
L6 3 SEA FILE=REGISTRY SSS FUL L4
L7 8 SEA FILE=CAPLUS ABB=ON PLU=ON L6

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L7 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:401689 CAPLUS

DOCUMENT NUMBER: 133:38230

TITLE: Methods and formulations based on epitope-presenting carriers for reducing circulating antibodies

INVENTOR(S): Jack, Richard M.; Jones, David S.; Yu, Lin; Engle, Steven B.

PATENT ASSIGNEE(S): La Jolla Pharmaceutical Company, USA

SOURCE: PCT Int. Appl., 74 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000033887	A2	20000615	WO 1999-US29336	19991209
WO 2000033887	A3	20000817		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,

CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2353620	AA	20000615	CA 1999-2353620	19991209
EP 1135167	A2	20010926	EP 1999-966115	19991209

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 2002531531	T2	20020924	JP 2000-586377	19991209
US 2001010818	A1	20010802	US 2001-766365	20010118
US 2002155107	A1	20021024	US 2002-115806	20020403
US 2005220785	A1	20051006	US 2005-144155	20050602

PRIORITY APPLN. INFO.:

US 1998-111639P	P	19981209
US 1999-457875	A2	19991208
WO 1999-US29336	W	19991209
US 2001-766365	A1	20010118
US 2002-115806	B1	20020403

ED Entered STN: 16 Jun 2000

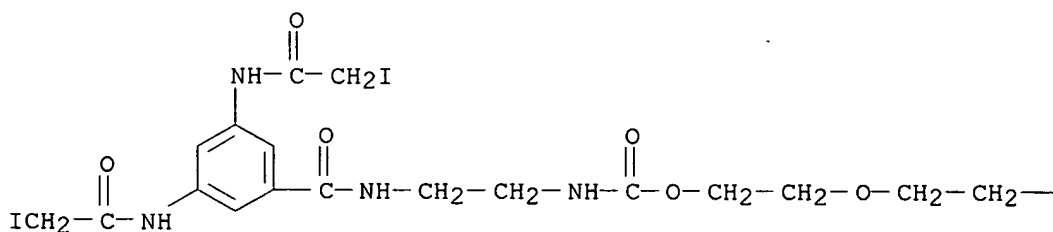
AB The invention provides methods for reducing circulating levels of antibodies, particularly disease-associated antibodies. The methods entail administering effective amts. of epitope-presenting carriers to an individual. In other embodiments, ex vivo methods for reducing circulating levels of antibodies are provided which employ epitope-presenting carriers. For example, an octameric toleragen LJP 920 was prepared and used for treating two rhesus monkeys i.v. at a dose of 20 mg/kg daily for 7 days. At day 8, IgG anti- α Gal levels were decreased by 11%, while control animals showed little change. Similarly, there was a diminution of 18% in IgM anti- α Gal levels in one monkey and 5% in the replicate animal. By contrast, IgM anti- α Gal levels in the control animals did not change in one animal and increased in the replicate animal. The octamer was more efficient than the tetramer LJP 712 at clearing IgM anti- α Gal, indicating that increased valency results in a more efficacious mol.

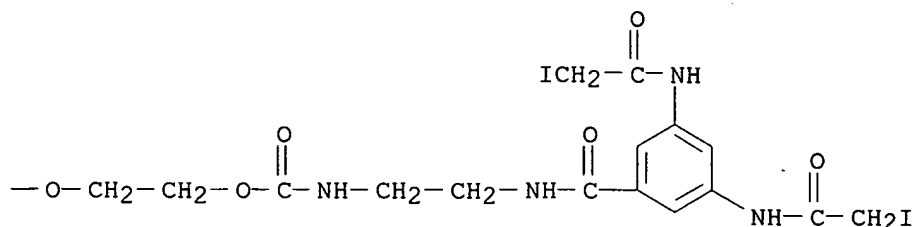
IT **200291-42-5**
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (epitope-presenting carriers for reducing circulating antibodies)

RN 200291-42-5 CAPLUS

CN Carbamic acid, [2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A



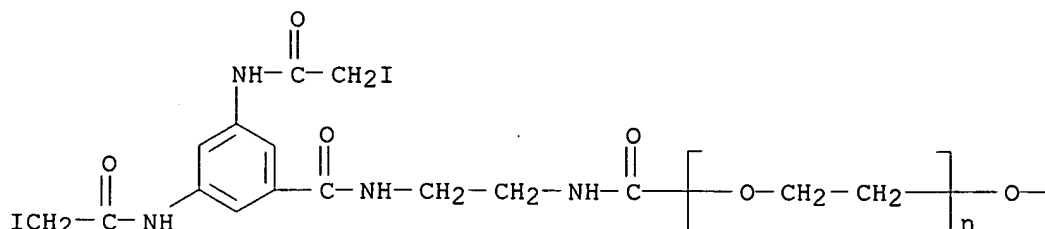


L7 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2000:307077 CAPLUS
 DOCUMENT NUMBER: 132:320935
 TITLE: Induction of humoral anergy using immunogen conjugates lacking T-cell epitopes
 INVENTOR(S): Coutts, Stephen M.; Barstad, Paul A.; Iverson, G. Michael; Jones, David S.
 PATENT ASSIGNEE(S): La Jolla Pharmaceutical Company, USA
 SOURCE: U.S., 30 pp., Cont.-in-part of U.S. 5,268,454.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 8
 PATENT INFORMATION:

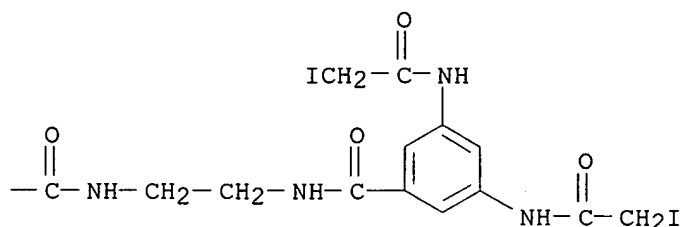
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US 6060056	A	20000509	US 1993-118055	19930908
US 5268454	A	19931207	US 1991-652648	19910208
CA 2076648	AA	19920809	CA 1992-2076648	19920204
CA 2076648	C	19990817		
WO 9213558	A1	19920820	WO 1992-US975	19920204
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AU 9214118	A1	19920907	AU 1992-14118	19920204
AU 646157	B2	19940210		
JP 05508421	T2	19931125	JP 1992-505775	19920204
JP 2544873	B2	19961016		
CA 2277724	C	20030527	CA 1992-2277724	19920204
AT 142109	E	19960915	AT 1992-301036	19920207
ES 2094287	T3	19970116	ES 1992-301036	19920207
US 5552391	A	19960903	US 1993-152506	19931115
JP 07126186	A2	19950516	JP 1993-298747	19931129
JP 2002087991	A2	20020327	JP 2001-197540	19931129
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EP 642798	A3	19980916		
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CA 2171434	AA	19950316	CA 1994-2171434	19940908
WO 9507073	A1	19950316	WO 1994-US10031	19940908
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RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
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EP 722318	A1	19960724	EP 1994-928016	19940908
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US 5606047	A	19970225	US 1995-453254	19950530
US 5633395	A	19970527	US 1995-453452	19950530
NO 9600952	A	19960502	NO 1996-952	19960307
FI 9601100	A	19960508	FI 1996-1100	19960308
US 2002082400	A1	20020627	US 2000-753350	20001229
US 2002107389	A1	20020808	US 2000-752533	20001229
US 2003103990	A1	20030605	US 2002-81076	20020220
US 2003162953	A1	20030828	US 2002-144391	20020510
US 2005031635	A1	20050210	US 2004-892956	20040716
US 2005170436	A1	20050804	US 2004-957198	20041001
PRIORITY APPLN. INFO.:			US 1991-652648	A2 19910208
			US 1990-466138	B2 19900116
			US 1990-494118	A2 19900313
			AU 1992-14118	A 19920204
			CA 1992-2076648	A3 19920204
			JP 1992-505775	A 19920204
			WO 1992-US975	A 19920204
			EP 1992-301036	A 19920207
			IE 1992-419	A 19920207
			US 1992-914869	A2 19920715
			US 1993-118055	A2 19930908
			US 1993-142598	A 19931022
			US 1993-152506	A 19931115
			EP 1993-309288	A 19931122
			JP 1993-298747	A3 19931129
			JP 1995-508766	A3 19940908
			WO 1994-US10031	W 19940908
			US 1995-453254	A3 19950530
			US 1996-769041	A1 19961218
			US 2000-563167	B1 20000502
			US 2002-81076	A1 20020220
ED	Entered STN: 12 May 2000			
AB	The authors disclose the preparation of conjugates of non-immunogenic carrier mols. with B-cell epitopes that possess ability to suppress antigen-specific antibody responses. In one example, mice were primed with the main immunogenic region of the acetylcholine receptor. Subsequent immunization of these mice with a B-cell epitope peptide, lacking the ability to activate primed T-cells, led to a specific suppression of the anti-receptor antibody response. In a second example, mice were primed with the bee venom allergen, mellitin. Immunization with peptides conjugated to lysine-glutamate copolymer suppressed the anti-mellitin response.			
IT	154231-81-9P			
	RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)			
	(preparation and conjugation to B-cell epitopes)			
RN	154231-81-9 CAPLUS			
CN	Poly(oxy-1,2-ethanediyl), α -[[[2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]amino]carbonyl]- ω -[[[2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]amino]carbonyl]oxy]- (9CI) (CA INDEX NAME)			

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REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:242945 CAPLUS

DOCUMENT NUMBER: 131:72399

TITLE: Multivalent Thioether-Peptide Conjugates: B Cell Tolerance of an Anti-Peptide Immune Response

AUTHOR(S): Jones, David S.; Coutts, Stephen M.; Gamino, Christina A.; Iverson, G. Michael; Linnik, Matthew D.; Randow, Martina E.; Ton-Nu, Huong-Thu; Victoria, Edward J.

CORPORATE SOURCE: La Jolla Pharmaceutical Company, San Diego, CA, 92121, USA

SOURCE: Bioconjugate Chemistry (1999), 10(3), 480-488
CODEN: BCCHE; ISSN: 1043-1802

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 21 Apr 1999

AB Antibodies which bind β 2-glycoprotein I (β 2GPI) are associated with antiphospholipid syndrome. Synthetic peptide mimotopes have been discovered which compete with β 2GPI for binding to selected anti- β 2GPI. A thiol-containing linker was attached to the N-terminus of two cyclic thioether peptide mimotopes, peptides 1a and 1b. The resulting peptides, with linker attached, were reacted with two different haloacetylated platforms to prepare four tetravalent peptide-platform conjugates to be tested as B cell toleragens. The linker-containing peptides were reacted with maleimide-derivatized keyhole limpet hemocyanin (KLH) to provide peptide-KLH conjugates. Peptides 1a and 1b were also modified by acylation with 3-(4'-hydroxyphenyl)propionic acid N-hydroxysuccinimidyl ester. The resulting hydroxyphenyl peptides were radioiodinated and used to measure anti-peptide antibody levels. The KLH conjugates were used to immunize mice to generate an anti-peptide immune response. The immunized mice were treated with the conjugates or saline solution and boosted with the

appropriate peptide-KLH conjugate. Three of the four conjugates suppressed the formation of anti-peptide antibody. The stabilities of the conjugates in mouse serum were measured, and the relative stabilities did not correlate with ability to suppress antibody formation.

IT **200291-42-5P**

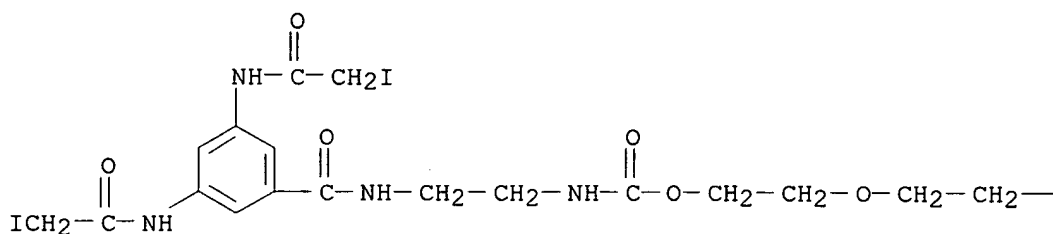
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of; multivalent thioether-peptide conjugates in relation to B-cell tolerance)

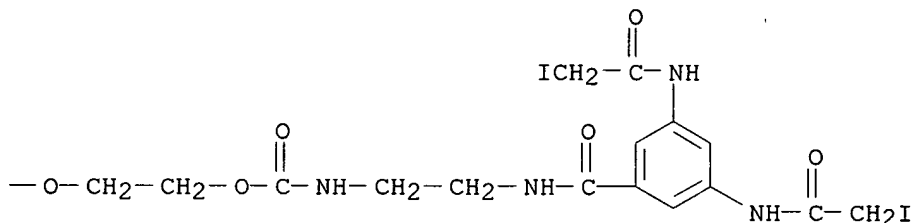
RN 200291-42-5 CAPLUS

CN Carbamic acid, [2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A



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REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:1383 CAPLUS

DOCUMENT NUMBER: 128:61804

TITLE: aPL immunoreactive peptides and their conjugates for treatment of aPL antibody-mediated pathologies

INVENTOR(S): Victoria, Edward Jess; Marquis, David Matthew; Jones, David S.; Yu, Lin

PATENT ASSIGNEE(S): Lajolla Pharmaceutical Company, USA; Victoria, Edward Jess; Marquis, David Matthew; Jones, David S.; Yu, Lin

SOURCE: PCT Int. Appl., 155 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 9746251 A1 19971211 WO 1997-US10075 19970606
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RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
US 6207160 B1 20010327 US 1996-660092 19960606
CA 2256449 AA 19971211 CA 1997-2256449 19970606
AU 9736404 A1 19980105 AU 1997-36404 19970606
AU 734638 B2 20010621
EP 954531 A1 19991110 EP 1997-933138 19970606
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
JP 2000512981 T2 20001003 JP 1998-500927 19970606
NO 9805636 A 19990208 NO 1998-5636 19981203
PRIORITY APPLN. INFO.:
US 1996-660092 A2 19960606
US 1996-760508 A 19961205
US 1995-482651 A2 19950607
WO 1997-US10075 W 19970606

ED Entered STN: 02 Jan 1998

AB APL analogs that bind specifically to B cells to which an aPL epitope binds are disclosed. Optimized analogs lacking T cell epitope(s) are useful as conjugates for treating aPL antibody-mediated diseases. Conjugates comprising aPL analogs and nonimmunogenic valency platform mols. are provided as are novel nonimmunogenic valency platform mols. and linkers. Methods of preparing and identifying said analogs, methods of treatment using said analogs, methods and compns. for preparing conjugates of said analogs and diagnostic immunoassays for aPL antibodies are disclosed.

IT 200291-42-5P

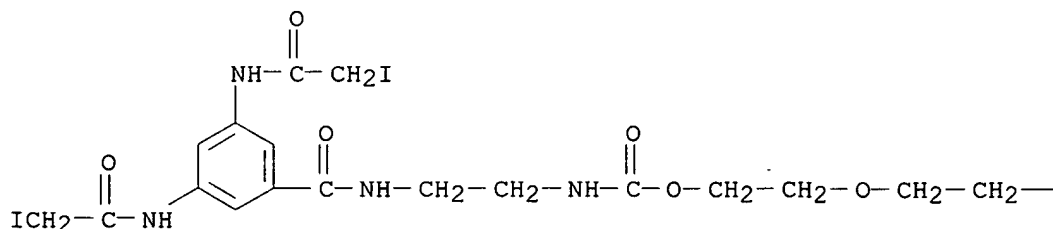
RL: BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

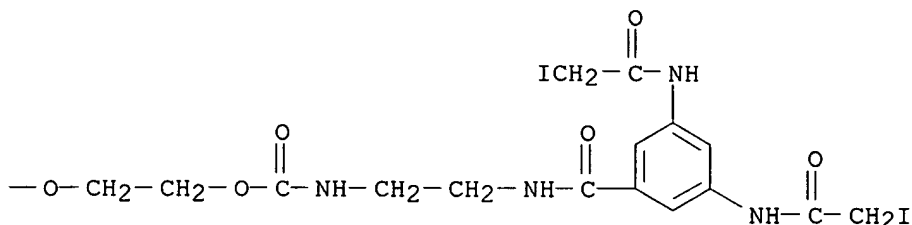
(aPL immunoreactive peptides and their conjugates for treatment of aPL antibody-mediated pathologies)

RN 200291-42-5 CAPLUS

CN Carbamic acid, [2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A





L7 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1996:577842 CAPLUS
 DOCUMENT NUMBER: 125:219609
 TITLE: Chemically-defined non-polymeric valency platform molecules and conjugates thereof
 INVENTOR(S): Coutts, Stephen M.; Jones, David S.; Livingston, Douglas A.; Yu, Lin
 PATENT ASSIGNEE(S): La Jolla Pharmaceutical Company, USA
 SOURCE: U.S., 59 pp., Cont.-in-part of U.S. 5,276,013.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 8
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5552391	A	19960903	US 1993-152506	19931115
US 5162515	A	19921110	US 1990-494118	19900313
JP 05505520	T2	19930819	JP 1991-503584	19910115
CA 2173878	C	20000404	CA 1991-2173878	19910115
JP 2001354569	A2	20011225	JP 2001-106534	19910115
US 5268454	A	19931207	US 1991-652648	19910208
AU 9214118	A1	19920907	AU 1992-14118	19920204
AU 646157	B2	19940210		
JP 05508421	T2	19931125	JP 1992-505775	19920204
JP 2544873	B2	19961016		
CA 2277724	C	20030527	CA 1992-2277724	19920204
NO 9202781	A	19920714	NO 1992-2781	19920714
NO 303940	B1	19980928		
FI 9203241	A	19920715	FI 1992-3241	19920715
FI 107514	B1	20010831		
US 5276013	A	19940104	US 1992-914869	19920715
US 6060056	A	20000509	US 1993-118055	19930908
JP 07126186	A2	19950516	JP 1993-298747	19931129
JP 2002087991	A2	20020327	JP 2001-197540	19931129
EP 642798	A2	19950315	EP 1993-309720	19931203
EP 642798	A3	19980916		
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CA 2171434	AA	19950316	CA 1994-2171434	19940908
WO 9507073	A1	19950316	WO 1994-US10031	19940908
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ				
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NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9477209	A1	19950327	AU 1994-77209	19940908
AU 677710	B2	19970501		
EP 722318	A1	19960724	EP 1994-928016	19940908
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
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JP 09500389	T2	19970114	JP 1995-508766	19940908
JP 2002085062	A2	20020326	JP 2001-214569	19940908
US 5606047	A	19970225	US 1995-453254	19950530
US 5633395	A	19970527	US 1995-453452	19950530
NO 9600952	A	19960502	NO 1996-952	19960307
FI 9601100	A	19960508	FI 1996-1100	19960308
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			WO 1991-US293	W 19910115
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ED Entered STN: 28 Sep 1996

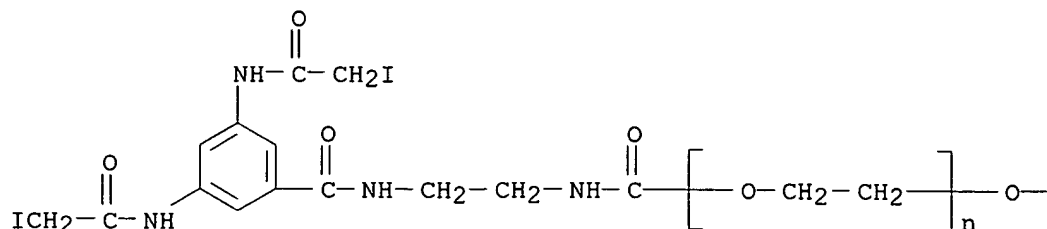
AB Chemical-defined, non-polymeric valency platform mols. and conjugates comprising chemical-defined valency platform mols. and biol. or chemical mols. including polynucleotide duplexes of at least 20 base pairs that have significant binding activity for human lupus anti-dsDNA autoantibodies. The polynucleotide duplex-containing conjugates are useful as toleragen for treating human autoimmune disease or systemic lupus erythematosus. In example, chemical-defined valency platform mols. were synthesized, conjugated with polynucleotide (PN) and hemagglutinin or sheep red blood cell, and used as toleragen to reduce PN-specific antibody-producing cells. Similarly, conjugates of the platform mols. and melittin peptides were prepared for inducing tolerance mice to melittin.

IT **154231-81-9P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (chemical-defined non-polymeric valency platform mols. and conjugates with polynucleotide or melittin as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)

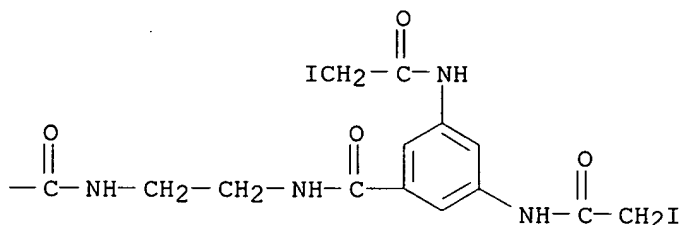
RN 154231-81-9 CAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[[[2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]amino]carbonyl]- ω -[[[2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]amino]carbonyl]oxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L7 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:892826 CAPLUS

DOCUMENT NUMBER: 124:290272

TITLE: Preparation of chemically-defined non-polymeric
valency platform molecules and conjugates thereof.

INVENTOR(S): Coutts, Stephen; Jones, David S.; Livingston, Douglas
Alan; Yu, Lin

PATENT ASSIGNEE(S): La Jolla Pharmaceutical Co., Can.

SOURCE: Eur. Pat. Appl., 76 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

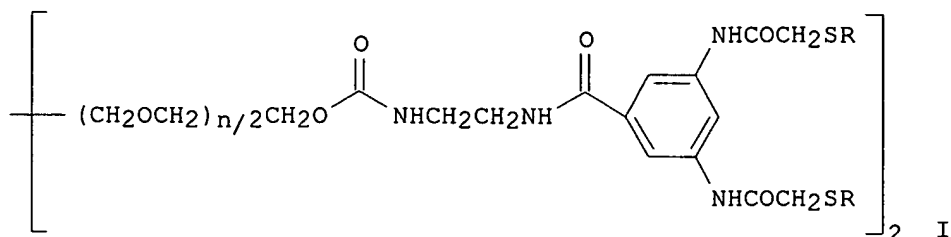
FAMILY ACC. NUM. COUNT: 8

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 642798	A2	19950315	EP 1993-309720	19931203
EP 642798	A3	19980916		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
US 6060056	A	20000509	US 1993-118055	19930908
US 5552391	A	19960903	US 1993-152506	19931115
PRIORITY APPLN. INFO.:				
			US 1993-118055	A 19930908
			US 1993-142598	A 19931022
			US 1993-152506	A 19931115
			EP 1993-309288	A 19931122
			US 1990-466138	B2 19900116
			US 1990-494118	A2 19900313
			US 1991-652648	A2 19910208
			US 1992-914869	A2 19920715

ED Entered STN: 03 Nov 1995

GI



AB Conjugates comprising biol. or chemical mols., including polynucleotide duplexes of at least 20 base pairs that have significant binding activity for human lupus anti-dsDNA autoantibodies, reacted with valency platforms G1(T1)n, G2[L2J2Z2(pT2)]m [G1, G2 = null, (branched) chain containing 1-2000 atoms selected from C, N, O, Si, P, S; T1, T2 = NHR, CONHNHR, NHNHR, CO2H, CO2R1, COX, SO2X, SH, OH, etc.; R = H, alkyl, cycloalkyl, aralkyl; R1 = N-succinimidyl, p-nitrophenyl, pentafluorophenyl, etc.; X = halo, other leaving group; L2 = null, O, NR, S; J2 = null, CO, CS; Z2 = radical containing 1-200 atoms selected from C, H, N, O, Si, P, S, and containing attachment sites for functional groups; n, m = 1-32; p = 1-8; with provisos], were prepared. Thus, title conjugate (I; R = H-Trp-Ile-Lys-Arg-Lys-Arg-Gln-Gln-Lys-Cys-Gly-OH, bound through a cysteine S atom; n = approx. 74) (preparation given) at 1000 µg/mouse in mice primed and boosted with the parent protein melittin gave an 86.8% reduction in peptide specific plaque forming cells.

IT **169744-01-8P**

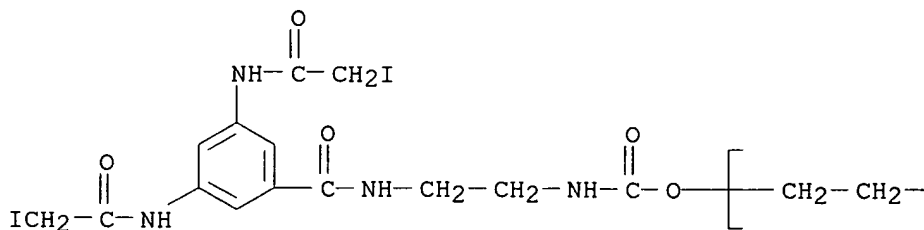
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of chemical-defined non-polymeric valency platform mols. and conjugates thereof)

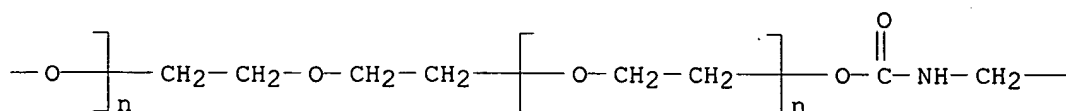
RN 169744-01-8 CAPLUS

CN Poly(oxy-1,2-ethanediyl), α,α'-(oxydi-2,1-ethanediyl)bis[ω-[[[2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]amino]carbonyl]oxy]- (9CI) (CA INDEX NAME)

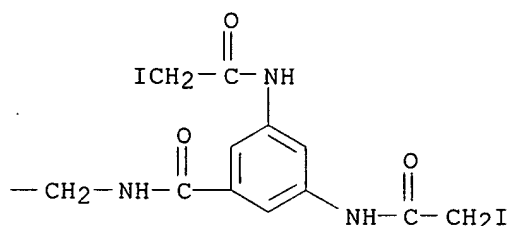
PAGE 1-A



PAGE 1-B



PAGE 1-C



L7 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:21766 CAPLUS

DOCUMENT NUMBER: 123:56497

TITLE: Conjugates of Double-Stranded Oligonucleotides with Poly(ethylene glycol) and Keyhole Limpet Hemocyanin: A Model for Treating Systemic Lupus Erythematosus

AUTHOR(S): Jones, David S.; Hachmann, John P.; Osgood, Stephen A.; Hayag, Merle S.; Barstad, Paul A.; Iverson, G. Michael; Coutts, Stephen M.

CORPORATE SOURCE: La Jolla Pharmaceutical Company, San Diego, CA, 92121, USA

SOURCE: Bioconjugate Chemistry (1994), 5(5), 390-9
CODEN: BCCHEs; ISSN: 1043-1802

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 08 Nov 1994

AB Two types of oligonucleotides were synthesized with linker groups attached at the 5'-end. Both were repeating dimers of deoxyribocytidine and deoxyriboadenosine. A 20-mer was prepared with a thiol-containing linker, masked as a disulfide, and a 50-mer was prepared with a vicinal diol-containing linker. A tetraiodo-acetylated poly(ethylene glycol) (PEG) derivative was synthesized and reacted with the thiol-containing 20-mer to provide an oligonucleotide PEG conjugate of precisely four oligonucleotides on each PEG carrier. The vicinal diol on the 50-mer was oxidized to an aldehyde and conjugated to keyhole limpet hemocyanin (KLH) to provide an oligonucleotide-KLH conjugate by reductive alkylation. The conjugates were annealed with complementary (TG)_n strands. While the double-stranded oligonucleotide-KLH conjugate is an immunogen, eliciting the synthesis of antibodies against oligonucleotides, the PEG conjugate has the biol. property of specifically suppressing (inducing tolerance) B cells which make antibodies against the immunizing oligonucleotide.

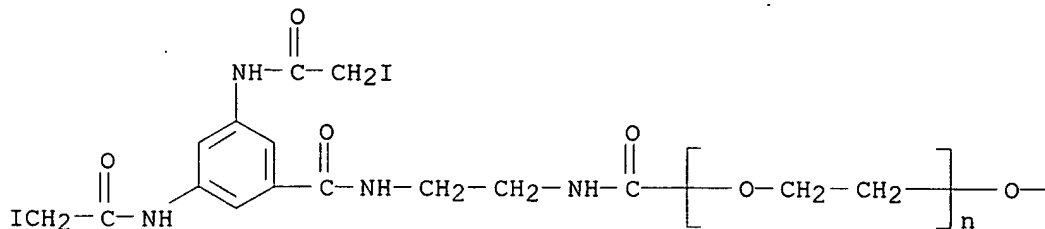
IT 154231-81-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and reaction of, in synthesis of oligodeoxyribonucleotide
duplexes as model for treatment of lupus erythematosus)

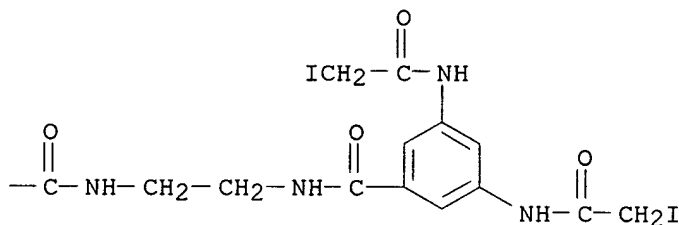
RN 154231-81-9 CAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[[[2-[[3,5-bis[(iodoacetyl)amino]benzoyl
]amino]ethyl]amino]carbonyl]- ω -[[[2-[[3,5-
bis[(iodoacetyl)amino]benzoyl]amino]ethyl]amino]carbonyl]oxy]- (9CI) (CA
INDEX NAME)

PAGE 1-A



PAGE 1-B



L7 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:261341 CAPLUS

DOCUMENT NUMBER: 120:261341

TITLE: Conjugates of biologically stable polyfunctional
molecules and polynucleotides for treating systemic
lupus erythematosus (SLE)

INVENTOR(S): Conrad, Michael J.; Coutts, Stephen

PATENT ASSIGNEE(S): La Jolla Pharmaceutical Co., USA

SOURCE: U.S., 21 pp. Cont.-in-part of U.S. 5,162,515.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 8

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5276013	A	19940104	US 1992-914869	19920715
US 5162515	A	19921110	US 1990-494118	19900313
CA 2034197	AA	19910717	CA 1991-2034197	19910115
CA 2034197	C	20010717		
WO 9110426	A1	19910725	WO 1991-US293	19910115
W: FI, JP, NO				
JP 05505520	T2	19930819	JP 1991-503584	19910115

AT 139448	E	19960715	AT 1991-300262	19910115
ES 2090233	T3	19961016	ES 1991-300262	19910115
CA 2173878	C	20000404	CA 1991-2173878	19910115
JP 2001354569	A2	20011225	JP 2001-106534	19910115
AU 9169418	A1	19910718	AU 1991-69418	19910116
AU 640730	B2	19930902		
NO 9202781	A	19920714	NO 1992-2781	19920714
NO 303940	B1	19980928		
FI 9203241	A	19920715	FI 1992-3241	19920715
FI 107514	B1	20010831		
US 5552391	A	19960903	US 1993-152506	19931115
US 5606047	A	19970225	US 1995-453254	19950530
US 5633395	A	19970527	US 1995-453452	19950530
US 2002082400	A1	20020627	US 2000-753350	20001229
US 2002107389	A1	20020808	US 2000-752533	20001229
US 2003162953	A1	20030828	US 2002-144391	20020510
US 2005026856	A1	20050203	US 2003-631388	20030730

PRIORITY APPLN. INFO.:

US 1990-466138	B2	19900116
US 1990-494118	A2	19900313
CA 1991-2034197	A3	19910115
JP 1991-503584	A3	19910115
WO 1991-US293	W	19910115
US 1991-652648	A2	19910208
US 1992-914869	A2	19920715
US 1993-118055	A2	19930908
US 1993-152506	A1	19931115
US 1995-453254	A3	19950530
US 1996-769041	A1	19961218

ED Entered STN: 28 May 1994

AB Chemical defined conjugates are disclosed which consist of biol. stable valency platform mols., e.g. copolymers of D-glutamic acid and D-lysine or PEG, and polynucleotide duplexes of ≥ 20 base pairs that have significant binding activity for human lupus anti-dsDNA autoantibodies. The duplexes are preferably homogeneous in length structure and are bound to the valency platform mol. via reaction between a functional group located at or proximate a terminus of each duplex and functional groups on the valency platform mol. The conjugates are tolerogens for human SLE. Thus a conjugate of D-glutamic acid-D-lysine copolymer with (AC)30:(TG)30 was prepared and tested as a tolerogen in a murine model for human SLE.

IT **154231-81-9P**

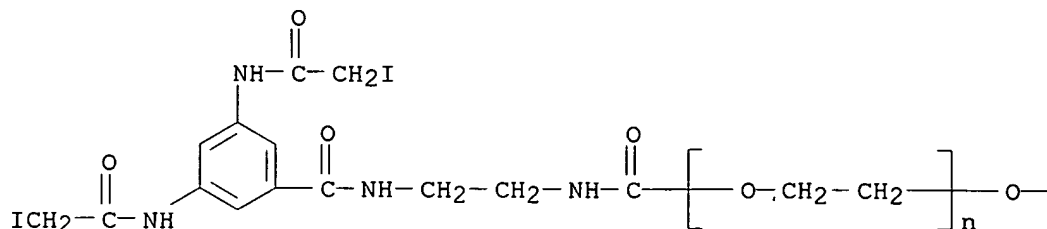
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in duplex polynucleotide-polymeric valency platform mol. conjugate preparation)

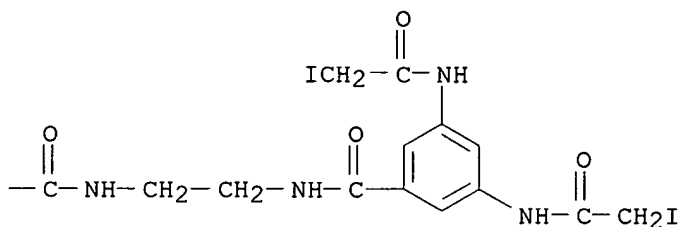
RN 154231-81-9 CAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[[[2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]amino]carbonyl]- ω -[[[2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]amino]carbonyl]oxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



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FILE 'CAOLD' ENTERED AT 15:01:29 ON 22 NOV 2005

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FILE LAST UPDATED: 01 May 1997 (19970501/UP)

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=> file uspatfull; d que nos l9

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CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 22 Nov 2005 (20051122/PD)
 FILE LAST UPDATED: 22 Nov 2005 (20051122/ED)
 HIGHEST GRANTED PATENT NUMBER: US6968571
 HIGHEST APPLICATION PUBLICATION NUMBER: US2005257307
 CA INDEXING IS CURRENT THROUGH 22 Nov 2005 (20051122/UPCA)
 ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 22 Nov 2005 (20051122/PD)
 REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2005
 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2005

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>>> USPAT2 is now available.  USPATFULL contains full text of the  <<<
>>> original, i.e., the earliest published granted patents or  <<<
>>> applications.  USPAT2 contains full text of the latest US  <<<
>>> publications, starting in 2001, for the inventions covered in  <<<
>>> USPATFULL.  A USPATFULL record contains not only the original  <<<
>>> published document but also a list of any subsequent  <<<
>>> publications.  The publication number, patent kind code, and  <<<
>>> publication date for all the US publications for an invention  <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL  <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc.  <<<

>>> USPATFULL and USPAT2 can be accessed and searched together  <<<
>>> through the new cluster USPATALL.  Type FILE USPATALL to  <<<
>>> enter this cluster.  <<<
>>> Use USPATALL when searching terms such as patent assignees,  <<<
>>> classifications, or claims, that may potentially change from  <<<
>>> the earliest to the latest publication.  <<<
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This file contains CAS Registry Numbers for easy and accurate substance identification.

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L9          6 SEA FILE=USPATFULL ABB=ON  PLU=ON  L6
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L9  ANSWER 1 OF 6  USPATFULL on STN
ACCESSION NUMBER:  2005:254291  USPATFULL
TITLE:             Methods and formulations for reducing circulating
                   antibodies
INVENTOR(S):       Engle, Steven B., Del Mar, CA, UNITED STATES
                   Jack, Richard M., Del Mar, CA, UNITED STATES
                   Jones, David S., San Diego, CA, UNITED STATES
                   Yu, Lin, San Diego, CA, UNITED STATES
```

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005220785	A1	20051006
APPLICATION INFO.:	US 2005-144155	A1	20050602 (11)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2002-115806, filed on 3 Apr 2002, ABANDONED		
	Continuation of Ser. No. US 2001-766365, filed on 18 Jan 2001, ABANDONED		
	Continuation of Ser. No. US 1999-457875, filed on 8 Dec 1999, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-111639P	19981209 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MORRISON & FOERSTER LLP, 755 PAGE MILL RD, PALO ALTO, CA, 94304-1018, US	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	29 Drawing Page(s)	
LINE COUNT:	1678	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods for reducing circulating levels of antibodies, particularly disease-associated antibodies. The methods entail administering effective amounts of epitope-presenting carriers to an individual. In other embodiments, ex vivo methods for reducing circulating levels of antibodies are provided which employ epitope-presenting carriers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

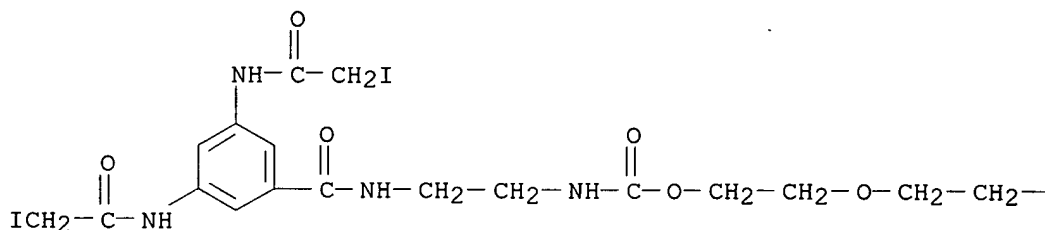
IT 200291-42-5

(epitope-presenting carriers for reducing circulating antibodies)

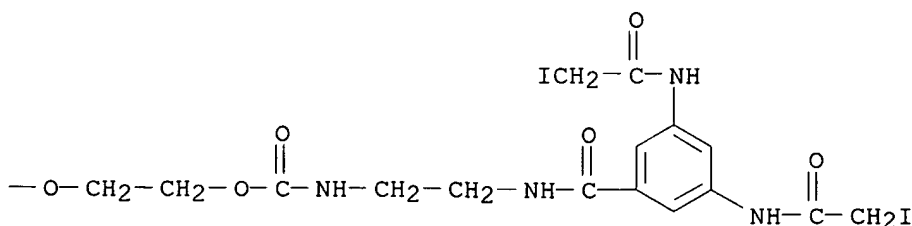
RN 200291-42-5 USPATFULL

CN Carbamic acid, [2-[[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L9 ANSWER 2 OF 6 USPATFULL on STN

ACCESSION NUMBER: 2002:279676 USPATFULL

TITLE: Methods and formulations for reducing circulating antibodies

INVENTOR(S): Engle, Steven B., Del Mar, CA, UNITED STATES
 Jack, Richard M., Del Mar, CA, UNITED STATES
 Jones, David S., San Diego, CA, UNITED STATES

Yu, Lin, San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002155107	A1	20021024
APPLICATION INFO.:	US 2002-115806	A1	20020403 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-766365, filed on 18 Jan 2001, PENDING Continuation of Ser. No. US 1999-457875, filed on 8 Dec 1999, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-111639P	19981209 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Catherine M. Polizzi, Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA, 94304	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	29 Drawing Page(s)	
LINE COUNT:	1694	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods for reducing circulating levels of antibodies, particularly disease-associated antibodies. The methods entail administering effective amounts of epitope-presenting carriers to an individual. In other embodiments, ex vivo methods for reducing circulating levels of antibodies are provided which employ epitope-presenting carriers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

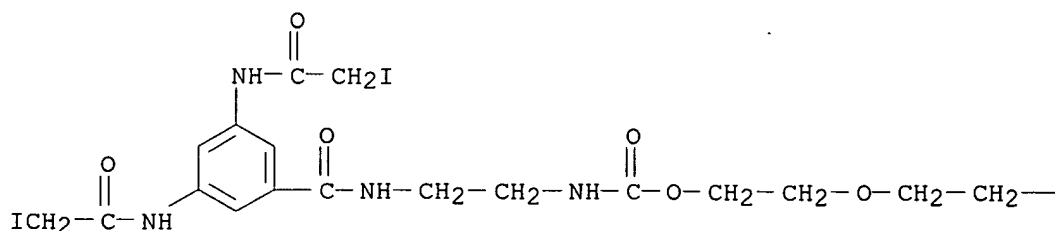
IT 200291-42-5

(epitope-presenting carriers for reducing circulating antibodies)

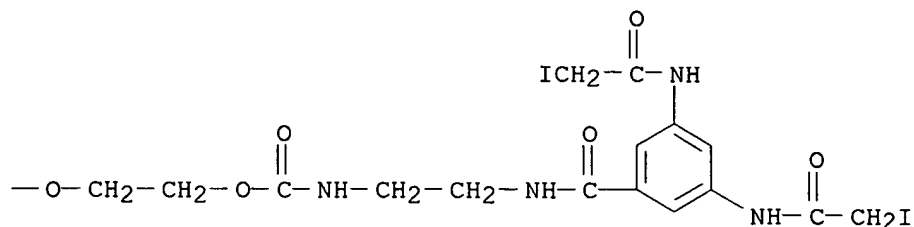
RN 200291-42-5 USPATFULL

CN Carbamic acid, [2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L9 ANSWER 3 OF 6 USPATFULL on STN

ACCESSION NUMBER: 2001:123310 USPATFULL

TITLE: Methods and formulations for reducing circulating antibodies

INVENTOR(S): Engle, Steven B., Del Mar, CA, United States
 Jack, Richard M., Del Mar, CA, United States
 Jones, David S., San Diego, CA, United States
 Yu, Lin, San Diego, CA, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001010818	A1	20010802
APPLICATION INFO.:	US 2001-766365	A1	20010118 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1999-457875, filed on 8 Dec 1999, ABANDONED		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-111639P	19981209 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MORRISON & FOERSTER LLP, 755 PAGE MILL RD, PALO ALTO, CA, 94304-1018	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	29 Drawing Page(s)	
LINE COUNT:	1696	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods for reducing circulating levels of antibodies, particularly disease-associated antibodies. The methods entail administering effective amounts of epitope-presenting carriers to an individual. In other embodiments, ex vivo methods for reducing circulating levels of antibodies are provided which employ epitope-presenting carriers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

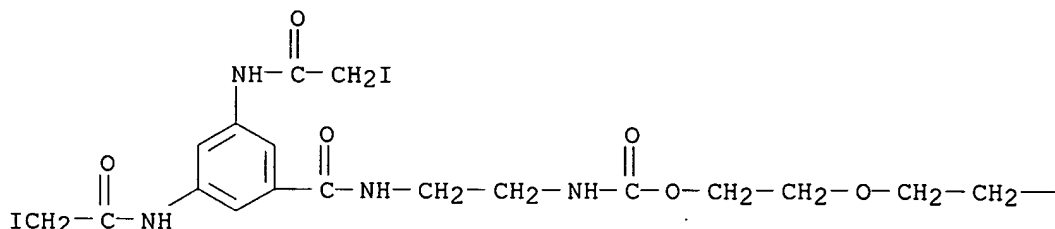
IT 200291-42-5

(epitope-presenting carriers for reducing circulating antibodies)

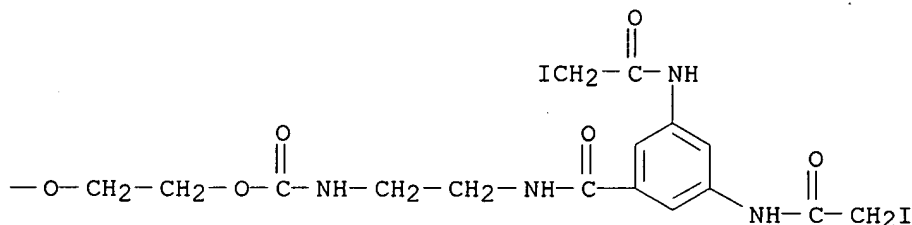
RN 200291-42-5 USPATFULL

CN Carbamic acid, [2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L9 ANSWER 4 OF 6 USPATFULL on STN

ACCESSION NUMBER: 2000:57352 USPATFULL

TITLE: Composition for inducing humoral anergy to an immunogen comprising a T cell epitope-deficient analog of the immunogen conjugated to a nonimmunogenic valency platform molecule

INVENTOR(S): Coutts, Stephen M., Rancho Santa Fe, CA, United States
 Barstad, Paul A., Escondido, CA, United States
 Iverson, G. Michael, Del Mar, CA, United States
 Jones, David S., San Diego, CA, United States

PATENT ASSIGNEE(S): La Jolla Pharmaceutical Company, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6060056		20000509
APPLICATION INFO.:	US-1993-118055		19930908 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1991-652648, filed on 8 Feb 1991, now patented, Pat. No. US 5268454		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Saunders, David		
LEGAL REPRESENTATIVE:	Morrison & Foerster, LLP		
NUMBER OF CLAIMS:	56		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	11 Drawing Figure(s); 11 Drawing Page(s)		
LINE COUNT:	1608		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Conjugates of nonimmunogenic valency platform molecules and analogs of immunogens that possess the specific B cell binding ability of the immunogen but lack T cell epitopes and which, when introduced into individuals, induce humoral anergy to the immunogen are disclosed. Accordingly, these conjugates are useful for treating antibody-mediated

pathologies that are caused by foreign or self immunogens.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

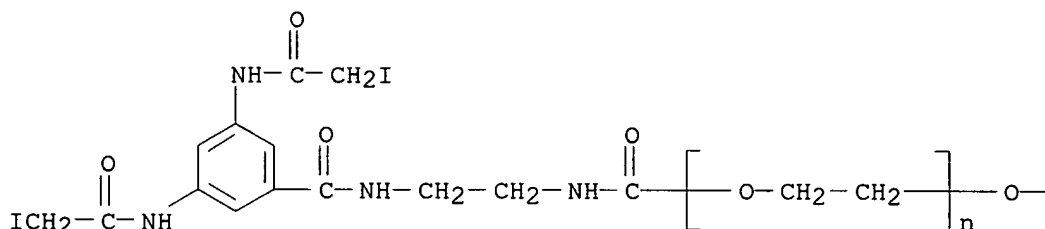
IT **154231-81-9P**

(preparation and conjugation to B-cell epitopes)

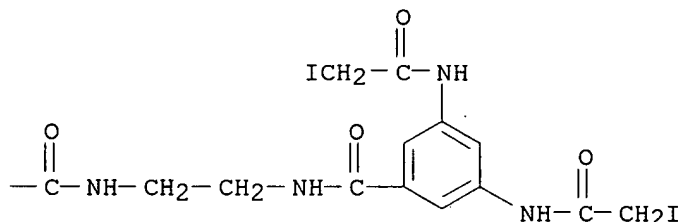
RN 154231-81-9 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[[[2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]amino]carbonyl]- ω -[[[2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]amino]carbonyl]oxy]- (9CI)
(CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L9 ANSWER 5 OF 6 USPATFULL on STN

ACCESSION NUMBER: 96:80258 USPATFULL

TITLE: Chemically-defined non-polymeric valency platform molecules and conjugates thereof

INVENTOR(S): Coutts, Stephen M., Rancho Santa Fe, CA, United States
Jones, David S., San Diego, CA, United States
Livingston, Douglas A., San Diego, CA, United States
Yu, Lin, San Diego, CA, United States

PATENT ASSIGNEE(S): La Jolla Pharmaceutical Company, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5552391		19960903
APPLICATION INFO.:	US 1993-152506		19931115 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1992-914869, filed on 15 Jul 1992, now patented, Pat. No. US 5276013 which is a continuation-in-part of Ser. No. US 1990-494118, filed on 13 Mar 1990, now patented, Pat. No. US 5162515, issued on 10 Nov 1992 which is a continuation-in-part of Ser. No. US 1990-466138, filed on 16 Jan 1990, now abandoned And a		

continuation-in-part of Ser. No. US 1993-118055, filed on 8 Sep 1993 which is a continuation-in-part of Ser. No. US 1991-652648, filed on 8 Feb 1991, now patented, Pat. No. US 5268454

DOCUMENT TYPE: Utility
 FILE SEGMENT: Granted
 PRIMARY EXAMINER: Rollins, John W.
 LEGAL REPRESENTATIVE: Morrison & Foerster
 NUMBER OF CLAIMS: 12
 EXEMPLARY CLAIM: 1
 NUMBER OF DRAWINGS: 16 Drawing Figure(s); 16 Drawing Page(s)
 LINE COUNT: 3038

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Chemically-defined, non-polymeric valency platform molecules and conjugates comprising chemically-defined valency platform molecules and biological or chemical molecules including polynucleotide duplexes of at least 20 base pairs that have significant binding activity for human lupus anti-dsDNA autoantibodies.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

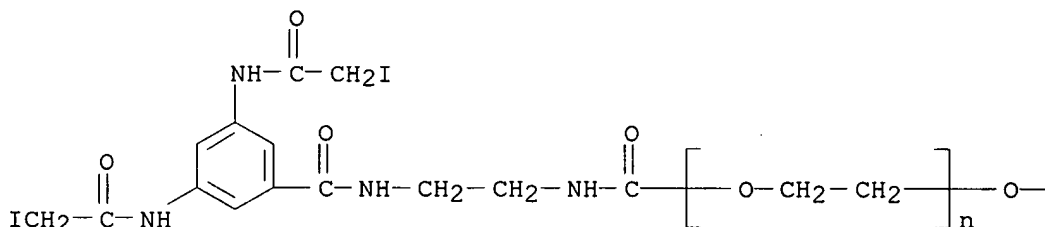
IT 154231-81-9P

(chemical-defined non-polymeric valency platform mols. and conjugates with polynucleotide or melittin as toleragen for autoimmune disease or systemic lupus erythematosus or bee venom)

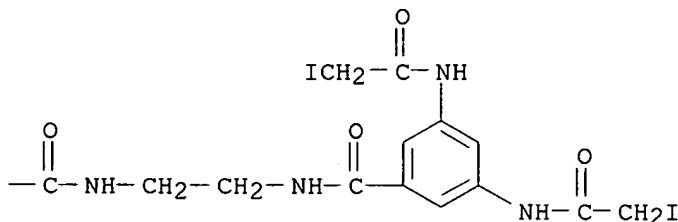
RN 154231-81-9 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[[[2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]amino]carbonyl]- ω -[[[2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]amino]carbonyl]oxy]- (9CI)
 (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L9 ANSWER 6 OF 6 USPATFULL on STN

ACCESSION NUMBER: 94:1406 USPATFULL

TITLE: Conjugates of biologically stable polyfunctional

molecules and polynucleotides for treating systemic lupus erythematosus

INVENTOR(S): Conrad, Michael J., San Diego, CA, United States
 Coutts, Stephen, San Diego, CA, United States

PATENT ASSIGNEE(S): La Jolla Pharmaceutical Company, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5276013		19940104
APPLICATION INFO.:	US-1992-914869		19920715 (7)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1990-494118, filed on 13 Mar 1990, now patented, Pat. No. US 5162515 which is a continuation-in-part of Ser. No. US 1990-466138, filed on 16 Jan 1990, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Rollins, John W.		
LEGAL REPRESENTATIVE:	Morrison & Foerster		
NUMBER OF CLAIMS:	33		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	8 Drawing Figure(s); 9 Drawing Page(s)		
LINE COUNT:	1128		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Chemically defined conjugates of biologically stable valency platform molecules, such as copolymers of D-glutamic acid and D-lysine or polyethylene glycol, and polynucleotide duplexes of at least 20 base pairs that have significant binding activity for human lupus anti-dsDNA autoantibodies. The duplexes are preferably homogeneous in length structure and are bound to the valency platform molecule via reaction between a functional group located at or proximate a terminus of each duplex and functional groups on the valency platform molecule. These conjugates are tolerogens for human systemic lupus erythematosus.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

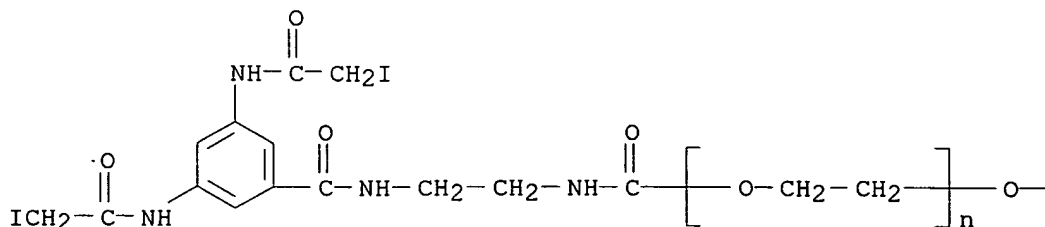
IT 154231-81-9P

(preparation and reaction of, in duplex polynucleotide-polymeric valency platform mol. conjugate preparation)

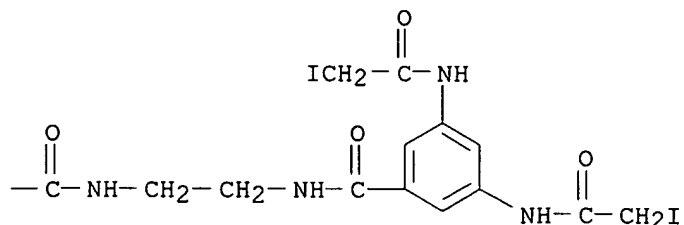
RN 154231-81-9 USPATFULL

CN Poly(oxy-1,2-ethanediyl), α -[[[2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]amino]carbonyl]- ω -[[[2-[[3,5-bis[(iodoacetyl)amino]benzoyl]amino]ethyl]amino]carbonyl]oxy]- (9CI)
 (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



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(FILE 'HOME' ENTERED AT 13:34:58 ON 22 NOV 2005)

FILE 'CAPLUS' ENTERED AT 13:35:06 ON 22 NOV 2005

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 D QUE NOS L9
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FILE HOME

FILE CAPLUS

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*
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* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

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Structure search iteration limits have been increased. See HELP SLIMITS
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<http://www.cas.org/ONLINE/UG/regprops.html>

FILE STNGUIDE
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LAST RELOADED: Nov 11, 2005 (20051111/UP).

FILE CAOLD
FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

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assignees, and patent information, e.g., patent numbers, are
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FILE USPATFULL
FILE COVERS 1971 TO PATENT PUBLICATION DATE: 22 Nov 2005 (20051122/PD)
FILE LAST UPDATED: 22 Nov 2005 (20051122/ED)
HIGHEST GRANTED PATENT NUMBER: US6968571
HIGHEST APPLICATION PUBLICATION NUMBER: US2005257307
CA INDEXING IS CURRENT THROUGH 22 Nov 2005 (20051122/UPCA)
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REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2005

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>>> applications.  USPAT2 contains full text of the latest US    <<<
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